

## ABSTRACT

An AGC control section (110) has a first operation mode for controlling the gain of a variable gain amplifier (103) to maintain the amplitude of the sync signal measured by a sync signal amplitude measuring circuit (108) at a constant value, and a second operation mode for preventing the gain from being increased even when the amplitude of the sync signal measured by the video signal processing circuit (109) is smaller than the predetermined first reference value and reducing the gain of the variable gain amplifier (103) only when the amplitude of the video signal exceeds a predetermined second reference value. During operation in the first operation mode, when the amplitude of the sync signal is smaller than the predetermined first reference value and the amplitude of the video signal is greater than the predetermined second reference value, the mode is switched to the second operation mode. During operation in the second operation mode, when the amplitude of the sync signal becomes not less than the predetermined first reference value, the mode is switched from the second operation mode to the first operation mode.